

REMARKS

Claim 11 has been amended to overcome the outstanding § 112 rejection.

Withdrawal is respectfully requested.

Claim 1 stands rejected under § 102(e) on the basis of Singleton et al.

Claim 1 also stands rejected under § 103 on the basis of Gill et al. and Singleton et al.

Claim 1 has been amended to overcome these rejections, and applicants traverse because neither reference discloses or suggests an interfacial roughness formed between a second pinned ferromagnetic layer and a nonmagnetic spacer layer that is smaller than a base interfacial roughness formed between an antiferromagnetic layer and the first pinned ferromagnetic layer, as in amended claim 1.

The present invention prevents transmission of base interfacial roughness formed on an antiferromagnetic layer. See Fig. 5 of the present application. The antiferromagnetic bonding layer 46b and the compound 51 serve to suppress the interfacial roughness formed between the second pinned ferromagnetic layer 46c and the non-magnetic spacer layer 47 (the non-magnetic spacer layer 47 is shown in Fig. 4). None of the references cited by the examiner in the outstanding office action discloses or even suggests the subject matter of the proposed claim 1. Withdrawal of these rejections is requested.

The rejections of dependent claims 2-5 are traversed for the reasons given with respect to independent claim 1. Withdrawal is requested.

Claim 6 is also ultimately dependent on claim 1, and is allowable for the reasons given with respect to claim 1.

Claims 11 and 12 stand rejected under § 103 on the basis of Singleton, Miyauchi and Maeda et al., and dependent claim 13 stands rejected under § 103, as well.

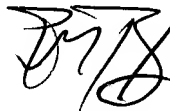
Independent claim 11 has been amended in the manner of claim 1, and is allowable for the reasons given with respect to claim 1. Accordingly, reconsideration and withdrawal of the rejections of claims 11-13 is respectfully requested.

For the foregoing reasons, applicants believe that this case is in condition for allowance, which is respectfully requested. The examiner should call applicants' attorney if an interview would expedite prosecution.

Respectfully submitted,

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